

NOVAK, Josef, MUDr.

Clinical and laboratory aspects of impetigo. Cesk. dermat.  
30 no.5:267-274 Oct 55.

1. I. dermatovener. klinika prof. Gawalowskeho.  
(IMPETIGO, diagnosis,  
clin. & laboratory)

NOVAK, Josef

~~Special skin symptoms in listeriosis.~~ Cas. lek. cesk.  
96 no.14: 420-421 4 Apr 57.

1. 1. dermatovenerologicka klinika, prednosta prof. Dr.  
K. Gawalowski.

(LISTERIA, infect.  
~~skin manifest.~~ (Cz))

(SKIN, pathol.  
in listeriosis (Cz))

CZECHOSLOVAKIA/Farm Animals. Swine.

Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101156

Author : Novak, Josef

Inst : -

Title : Discussing the Results of Controlled Fattening  
and Meat Productivity in Swine.

Orig Pub: Mas chov, 1957, No. 23, 634-635

Abstract: It is recommended that, when after-slaughter  
fattening results are compared to carcass  
evaluations, these comparisons should be  
continued on a larger scale throughout  
Czechoslovakia by using a single method under  
the supervision of the Academy of Agricultural  
Sciences.

Card 1/1

EXCERPTA MEDICA Sec 13 Vol 13/7 Dermatology July 59

1939. THE EFFECT OF EXOGENOUS INFLUENCES ON THE GENESIS AND COURSE OF CERTAIN CLINICAL TYPES OF DISEASE - Über den Einfluss exogener Faktoren auf das Entstehen und den Verlauf einiger klinischer Krankheitsformen - Novák J., I. Dermato-Venerol. Klin. K.U., Prag - DERM. WSCHR. 1958, 138/39 (1058-1065)

A connection is sought between the rhythmical course of numerous diseases and the periodic processes in nature; numerous examples are given, which, however, leave a great many questions unanswered.

Gruber - Munich

NOVAK, Jos.; KOLINSKY, J.

Phytodermatitis caused by Telekian Baumgartner (seu Baphthalarum).  
Cesk. dermat. 35 no.2:113-114 Ap '60.

1. I dermatovenerologicka klinika ~~XX~~, prednosta prof. MUDr. K. Gavalowski.

(DERMATITIS VENENATA case reports) (PLANTS)

NOVAK, Josef

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: MD

Affiliation: First Dermatovenereological Clinic of the Faculty of General Medicine, KU /Karlova universita; Charles University/ (I. dermatovenerologicka klinika fakulty vseobecneho lekarstvi KU), Prague;  
~~SOURCE~~ Director: Prof J. KONOPIK, MD.

Source: Prague, Prakticky Lekar, Vol 41, No 11, 1961, pp 509-512.

Data: "An Attempt of Preventing Occupational and Drug Exanthema by the Effect of a Modified Geomagnetic Field."

NOVAK, J.

Trials on desensitization in allergic dermatosis with a modified electrostatic, electromagnetic and geomagnetic field. Cesk. dermat. 38 no.1:47-56 F '63.

1. I. dermatovenerologicka klinika fakulty vseobecneho lekarstvi  
KU v Praze, prednosta prof. dr. J. Nopik, DrSc.  
(DERMATOLOGY) (ECZEMA) (URTICARIA) (PRURIGO)  
(NEURODERMATITIS) (ALLERGIC) (ELECTROTHERAPY)

1. SUMMARY

Authors: J. KAMPA and V. J. J. First Dermatovenereologic Clinic of Medical Faculty of Charles University (1. dermato-venerologická klinika I. karské fakulty Karlovy University) Head (prednosta) Prof. Dr. J. KAMPA, and Geophysical Institute of the Czechoslovak Academy of Sciences, Department of Helio-geophysics (Geofyzikální ústav ČSAV, Helio-geofyzikální ústav) Head (vedoucí) B. BLEDAROVA, PhD; Prague.

Subject: Effect of Pulsed Electromagnetic Field on the Human Body.

Source: Vestník Československé Akademie věd, Vol. 102, No. 10, 5 May 63, pp. 4-6-63.

Abstract: For brief report of device built in March 1963 at the Clinic. Studies on guinea pigs revealed that latter perceive impulses but do not suffer from them; 20 tests in authors and staff were carried out confirming same findings in man. Technical data and schematic diagram of apparatus.



NOVAK, Josef, MUDr.; MALÝ, Václav, MUDr., DrSc. doc.

First National Conference on Periodic Functions in Live  
Substances. Sdel. čest. 12 no. 6:340-3 '64.

1. First Dermatological Clinic, Prague 2, Apollinarova 4,  
for Novak. 2. First Psychological Clinic, Prague 2,  
Apollinarova 13 for Malý.

CZECHOSLOVAKIA

UDC 356.33:616-022.3-036.21

NOVAK, Josef; ONDREJCEK, Pavel; PRIHODA, Juraj; [Affiliation not given].

"The District of Lest as a Natural Infection-Spreading Focus."

Prague, Vojenske Zdravotnicko Listy, Vol 35, No 3, Jun 66, pp 13  
138 - 141

Abstract: The area of Lest has a higher concentration of ticks than other areas in Czechoslovakia. The ticks are carriers of some anthroponoses. Cases of babesiosis, toxoplasmosis, and brucellosis were found in the area. Replanting of the scrubs and frequent spraying of the grass to prevent establishment of the ticks is recommended. The carriers of ticks are discussed. 2 Tables, no references.

1/1

- 14 -

NOVAK, Josef, MUDr

Czechoslovakian Red Cross and its role in public health. Cas.lek.  
cesk. 91 no.51:1515 19 Dec 52.

(SOCIAL SERVICE,

Red Cross in Czech., pub. health aspects)

(PUBLIC HEALTH,

in Czech., role of Red Cross)

NOVAK, Josef, MUDr.; DOBRY, Eduard; GUTFREUNDOVA, Eliska

Use of transfusion preparations in 1957 & their planning. Cesk. zdravot.  
6 no.12:703-707 Dec 58.

1. Ustav hematologie a krevni transfuze v Praze, reditel prof. MUDr. J.  
Horejsi D Sc.

(BLOOD TRANSFUSION  
in Czech. (Cz))

JEZKOVA, Zdenka; KOVAK, Josef

Bacteriostatic & clinical viewpoints on alestene & rivanol in preserved solutions. Cas. lek. cesk. 98 no.12:364-367 20 Mar 59.

1. Ustav hematologie a krevni transfuze, praha, prednosta prof Dr. J. Horejsi. Zd. J., Praha 2, U nemocnice 1.

(SULFONAMIDES,

sulfacetamide, evaluation as additive in preserved blood (Cz))

(ANTISEPTICS

rivanol, evaluation as additive in preserved blood (Cz))

(BLOOD, PRESERVED

with addition of rivanol & sulfacetamide, evaluation (Cz))

~~LEHKY~~, Theodor  
SURNAME, Given Names

NOVAK; Josef (MD)

5-

Country: Czechoslovakia

Academic Degrees: Magister pharmaciae

Affiliation: Institute of Hematology and Blood Transfusion (Ustav hematologi  
a krevni transfuze), Prague; Director: Prof. Jaroslav HOREJSI,

Source: Dr. Sc.  
Prague, Vnitrni Lekarstvi, Vol VII, No 5, 1961, pages 521-524.

Data: "Effect of Repeated Blood Donations on Body Weight."

Co-author:

NOVAK, Josef, MD, Institute of Hematology and Blood Transfusion  
Prague.

JEHLICKOVA, M., /technical cooperation/, /not given/

SOMMEROVA, L., /technical cooperation/, /not given.

8FO 982643

NOVAK, Josef; MADLOVA, Zdena

The normal level of red and white blood cells in the Prague population.  
Cas. lek. cesk. 101 no.27:837-842 6 J1 '62.

1. Ustav hematologie a krevni transfuze v Praze, reditel prof. dr.  
J. Horejsi, DrSc.

(LEUKOCYTE COUNT) (ERYTHROCYTE COUNT)

NOVAK, JOSEF.

CZECHOSLOVAKIA /

SEJKOROVA, Jana; NOVAK, Josef, MD.

Institute of Hematology and Blood Transfusion  
(Ustav hematologie a krevni transfuse),  
Prague - (for all)

Prague, Vnitřní lékařství, No 4, 1963, pp 391-394

"Critical Comment on Absolute Eosinophil Counts.  
Comparison of the Dunger and Manners Methods."



NOVAK, J.; SEJKOROVA, J.

Withdrawal of blood as stress. I. Early changes in the eosinophil count. Cas. lek. cesk. 102 no.47:1294-1298 22 N '63.

1. Ustav hematologie a krevni transfuze v Praze, reditel prof. dr. J. Horejsi, DrSc.

NOVAK, Josef, MDr.; SEMKOVÁ, Jana

Erythrocyte level in normal people residents and their  
comparison with blood donor levels after repeated transfusions.  
Vnitřní lek. 11 no. 8: 1981-1989 Ag 1985.

1. Ústav hematologie a krevní transfuze v Praze, 150 05 Praha 5.  
MDr. J. Novák, MSc. J. Semková; Interní lékařská fakulta  
akademie věd.

DOBRY, E., MUDr., CSc.; NOVAK, J., MUDr.; RUZICKOVA, V.

Use of transfusion preparations in various branches of medicine  
in 1964. Cesk. zdrav. 13 no.7/8:388-394 Ag '65.

1. Ustav hematologie a krevni transfuze v Praze, Ministerstvo  
zdravotnictvi, oddeleni LP 2.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137410012-1

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137410012-1"

Novák, Jos. Construction d'espaces dont les points  $\bar{O}$ -resp.  $\bar{O}$ -séparables sont donnés d'avance. Časopis Pěst. Mat. Fys. 73, 49-57 (1948). (Czech. French summary)  
 The author calls two points of a topological space  $\bar{O}$ -separated ( $\bar{O}$ -separated) if they possess disjoint neighborhoods (closed neighborhoods). If  $M$  is a  $T_1$ -space [cf. Alexandroff and Hopf, Topologie, vol. 1, Springer, Berlin, 1935] let  $\varphi(x)$ , for any  $x \in M$ , consist of all  $y \in M$  such that  $x, y$  are not  $\bar{O}$ -separated. A sufficient condition is given for the existence of a  $T_1$ -space (on a given set  $M$ ) with prescribed sets  $\varphi(x)$ . In the second part of the paper, a construction is given, for any  $m > \aleph_0$ , of a Hausdorff space of power  $m$  containing no  $\bar{O}$ -separated points. This solves a problem of Alexandroff and Urysohn [Verh. Akad. Wetensch. Amsterdam, Afd. Naturk. Sect. 1, 14, no. 1 (1929)].  
 M. Kalfous (Prague).

SMW

Source: Mathematical Reviews.

Vol 10 No.7

Novák, Josef. Regular space, on which every continuous function is constant. Časopis Pěst. Mat. Fys. 73, 58-62 (1948). (Czech. English summary)

A problem of Urysohn [Math. Ann. 94, 262-295 (1925)] is solved by constructing, for an arbitrary  $m > \aleph_0$ , a regular topological space of power  $m$  in which every continuous real function is constant. The problem has already been solved (for every  $m$  which is not a sum of  $\aleph_0$  cardinal numbers less than  $m$ ) by E. Hewitt [Ann. of Math. (2) 47, 503-509 (1946); these Rev 8, 165]. The author's solution was found independently, and his method is different, making use of  $L$ -spaces [cf. Fréchet, Les Espaces Abstraits, Gauthier-Villars, Paris, 1928].  
M. Katělov (Prague).

*Smw*

Source: Mathematical Reviews,

Vol 10 No. 7

Novák, J. A paradoxical theorem. Fund. Math. 37, 77-83 (1950).

The author proves a theorem concerning ordinal numbers [which is actually a generalization of a theorem due to Alexandroff and Urysohn; see the following review], from which he derives the following theorem referred to in the title. Let  $S$  be a nonempty set, and define sets  $A_\alpha, B_\alpha$  by induction on  $\alpha$  as follows. Let  $A_0$  be a nonempty, at most enumerable subset of  $S$ ;  $B_0 = \emptyset$ . Let  $\beta > 0$ , and suppose that  $A_\alpha, B_\alpha$  have already been defined for every  $\alpha < \beta$ . If the set  $\sum_{\alpha < \beta} A_\alpha \cup \sum_{\alpha < \beta} B_\alpha$  is not empty, let  $B_\beta$  be a nonempty subset of it, and let  $A_\beta$  be an at most enumerable subset of  $S - \sum_{\alpha < \beta} A_\alpha$ . Then there exists an ordinal  $\xi$ ,  $1 \leq \xi < \omega_1$ , such that  $\sum_{\alpha < \xi} A_\alpha = \sum_{\alpha < \xi} B_\alpha$ . The above mentioned result on ordinals is also used to obtain two necessary and sufficient conditions for a continuous ordered set possessing the Souslin property of having no nonenumerable class of non-overlapping intervals to be the continuum.

F. Bagemihl (Rochester, N. Y.).

Source: Mathematical Reviews,

Vol 13 No. 4

NOVAK, Josef

②  
Novák, Josef, and Mišák, Ladislav. On  $L$ -spaces of continuous functions. Mat. Fyz. Sborník Slovensk. Akad. Vied Umení 1, 1-17 (1951). (Slovak. Russian and French summaries)

Let  $L$  be an  $\mathcal{L}$ -space in the sense of Fréchet. Let  $\{x_{m,n}\}_{m,n=1}^{\infty}$  be a double sequence of points in  $L$ . A diagonal subsequence of this double sequence is any sequence of the form  $\{x_{m_i, n_i}\}_{i=1}^{\infty}$  which no index  $m_i$  appears an infinite number of times. A point  $x \in L$  is said to have property  $\rho$  if there exists a double sequence  $\{x_{m,n}\}_{m,n=1}^{\infty}$  such that  $\lim_{m \rightarrow \infty} x_{m,n} = x$  for all  $n$  but such that no diagonal subsequence of the double sequence  $\{x_{m,n}\}_{m,n=1}^{\infty}$  converges to  $x$ . A construction is given showing that the space of continuous functions on  $[0, 1]$  under pointwise convergence contains a point having property  $\rho$ . Two  $\mathcal{L}$ -spaces  $L_1$  and  $L_2$  of which  $L_1$  contains a point with property  $\rho$  have the property that  $L_1 \times L_2$  is not an  $\mathcal{L}$ -space. Let  $G$  be an Abelian group which is an  $\mathcal{L}$ -space in which the group operation is compatible with the limit operation. The property  $A^{--} = A^-$  obtains for all subsets  $A$  of  $G$  if and only if  $G$  contains no point with property  $\rho$ .

E. Hewitt (Seattle, Wash.)

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10-21-54



NOVAK, J.

"On Some Ordered Continua of Power  $2X_0$  Containing A Dense Subset of Power  $X_1$ . In English." p . 63. (Casopis Pro Pestovani Matematiky Czechoslovak Mathematical Journal. Vol. 1, No. 2, Nov. 1951, Praha.)

SO: Monthly List of East European Accessions. Vol.3, No.3, Librarh of Congress, March 1954,  
Uncl.

NOVAK, J. (Praga)

Some characteristics of an ordered continuum [with summary in English].  
Chekh.mat.zhur. 2 no.4:369-386 Ja '53. (MLRA 7:5)  
(Topology) (Numbers, Theory of)

NOVAK, J. (Praga); VYICHLLO, F. (Praga); ZELINKA, R. (Praga).

Sixtieth anniversary of Academician Eduard Cech. Chekh.mat.shur.  
3 no.2:183-194 Je '53. (MLRA 7:5)  
(Cech, Eduard, 1893- )

NOVAK, JOSEF

NOVAK, Josef (Praga); NOVOTNY, Miroslav (Brno).

Convergence in  $\sigma$ -algebras of point-sets [in English with summary in Russian]. Chekh.mat.zhur. 3 no.3:291-296 S '53. (MIRA 7:5)  
(Aggregates) (Convergence)

NOVAK, Josef (Praga)

Some problems of Luzin concerning the subsets of natural numbers  
[with summary in English]. Chekh.mat.zhur. 3 no.4:385-395 D '53.  
(MLRA 7:5)

(Numbers, Theory of)

NOVAK, Josef, and NOVOTNÝ, Miroslav. On the convergence  
of point-sets. *Czechoslovak. Mat.* 2. 3(78),  
291-296 (1953). (Russian summary)

The principal result is that if  $A$  is a Boolean  $\sigma$ -algebra of  
sets then a necessary and sufficient condition that  $A$  be  
metrizable in such a way that metric convergence coincides  
with set-theoretic convergence ( $\lim \sup = \lim \inf$ ) is that  $A$   
be isomorphic to the class of all subsets of a countable set.

*P. R. Halmos (Chicago, Ill.).*

Novák, Josef. On some problems of Luzin concerning the  
~~existence of~~ natural numbers. Čechoslovack. Mat. Ž.  
 3(78), 385-395 (1953). (Russian. English summary)

The problems of Luzin [Izvestiya Akad. Nauk. SSSR.  
 Ser. Mat. 11, 403-410 (1947); these Rev. 9, 82] considered  
 are (1), (2), (3) in the review cited, and the following  
 problem: (4) To prove or disprove the existence of two  
 families  $\mathcal{S} = \{E_0, E_1, \dots, E_\alpha, \dots\}$  ( $\alpha < \omega$ ) and

$$\mathcal{T} = \{F_0, F_1, \dots, F_\alpha, \dots\} \quad (\alpha < \Omega)$$

such that  $\mathcal{S}$  and  $\mathcal{T}$  are orthogonal and strictly increasing but  
 not separated. By means of the bicomactification  $\beta(I)$  [cf.  
 Čech. Ann. of Math. (2) 38, 823-844 (1937)] of the set  $I$   
 of natural numbers, the author reduces the problems to  
 topological ones, and gives affirmative solutions of (1) and

(4) under the assumption that  $2^{\aleph_0} = \aleph_1$ , and of (2) and (3)  
 under the assumption that  $2^{\aleph_0} < 2^{\aleph_1}$ . He notes that Sierpiński  
 [Fund. Math. 35, 141-150 (1948); these Rev. 10, 689] gave  
 an affirmative solution of (3) under the hypothesis that  
 $2^{\aleph_0} = \aleph_1$ , but fails to note that Sierpiński [Atti Accad. Naz.  
 Lincei. Rend. Cl. Sci. Fis. Mat. Nat. (8) 4, 519-520 (1948);  
 these Rev. 10, 1847] also gave an affirmative solution of (1)

NOVAK, J.

①  
Novák, J. On the Cartesian product of two compact spaces. Fund. Math. 40, 106-112 (1953).

Two regular countably compact spaces are constructed whose Cartesian product is not countably compact. If  $X$  and  $Y$  are, however, regular countably compact spaces and if  $X$  is compact, then  $X \times Y$  is countably compact (Katětov).

E. Hewitt (Seattle, Wash.).

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10-28-54 LL



NOVAK, Josef, dr., akademik, prof.; PONCOVA, Vera, MUDr; MATENHA, Vladimir,  
MUDr, Praha

Contribution to the form of indexes of dental caries. Cesk. stomat.  
no.3:86-96 June 54.

(DENTAL CARIES

index, improvement proposals)

Novák, J. On a problem concerning completely regular  
~~spaces~~ *Canad. Math. 41, 103-104 (1954).*

A noncompact completely regular space is constructed on which all continuous real-valued functions are bounded, thus answering a question attributed to Slowikowski and Zawadowski. However, completely regular spaces on which all continuous real-valued functions are bounded have already been characterized completely by the reviewer [*Trans. Amer. Math. Soc.* 64, 45-99 (1948), Theorem 28; *these Rev.* 10, 126]. *E. Hewitt (Seattle, Wash.).*

NOVAK, J.

NOVAK, J.

"First study conference of Czechoslovak mathematical statisticians in Prague", P. 379., (SPORNIEK TRANSACTIONS, Vol. 70, No. 4, Dec. 1954, Praha, Czechoslovakia)

30: Monthly List of East European Accessions, (EEL), LC, Vol. 4, No. 6, June 1955, Uncl.

1. . . . .

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NOVAK, J.

Convergence in double series; from a lecture held at the Prague Mathematical Society on April 9, 1956.

p. 230 (CASOPIS PRO PESTOVANI MATEMATIKY) Vol. 82, no. 2, May 1957,  
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EFAI) LC, Vol. 7, No. 3,  
March 1958

On the Uniqueness of the Continuous Extension of Continuous Functions

1254:

Novák, Josef. Über die eindeutigen stetigen Erweiterungen stetiger Funktionen. Czechoslovak Math. J. 8 (83) (1958), 344-355. (Russian summary)

Let  $X$  be a Fréchet  $L$ -space for which also the Urysohn axiom holds, namely: if  $\{x_n\}$  does not converge to  $x$ , then there exists a subsequence  $\{x_{n_k}\}$  such that no further subsequence  $\{x_{n_{k_j}}\}$  converges to  $x$ . The author calls "Abschliessung" ("closure")  $vA$  of a set  $A \subset X$  the set of all limit points  $x = \lim x_n$  with  $x_n \in A$ . By transfinite induction the " $\alpha$ th Abschliessung"  $v^\alpha A$  of the set  $A$  is also defined for each countable ordinal number  $\alpha$ . Moreover, he sets  $uA = \bigcup_{\alpha} v^\alpha A$  where the union refers to all countable ordinal numbers  $\alpha$ . The author then gives conditions under which a continuous real function  $f$  defined on  $A$  can be extended to a continuous function on  $vA$  (or on  $uA$ ) in a unique manner. Then he applies his results to the extension of a bounded measure on a ring of sets to the corresponding  $\sigma$ -ring of sets without using the Carathéodory outer measure.

A. Rosenthal (Lafayette, Ind.)

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I-F/W

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Novak, J.

Using combinative analysis for studying plane configurations (12<sub>1</sub>, 16<sub>3</sub>). p. 257.

GASOPIS PRO PESTOVANI MATEMATIKY, Praha, Czechoslovakia. Vol. 84, no. 3, Aug. 1959

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, no. 10, 1959.-Oct.  
Uncl.

NOVAK, Jiri

Contribution to the theory of combinations. Cas pro pest\_  
mat 88 no.2:129-141 '63.

1. Vysoka skola strojni, Liberec I, Halkova 6.



NOVAK, Josef

On a topological relation between a  $\mathcal{C}$ -algebra  $A$  of sets and the system of all  $A$ -measurable functions. Chekhovskiy matematicheskiy zhurnal 14 no. 2:267-270 '64.

1. Institute of Mathematics, Czechoslovak Academy of Sciences, Prague 1, Zitna 25.

L 60283-65 EWT(d) IJP(c)

ACCESSION NR: AP5021198

CZ/0045/64/000/004/0265/0276

AUTHOR: Novak, Josef (Prague)

TITLE: Certain Cremona transformations in a plane and their use

SOURCE: Matematicko-fyzikalny casopis, no. 4, 1964, 265-276

TOPIC TAGS: curve geometry, mathematic transformation

Abstract (Author's Czech summary, modified): The article deals with Cremona quadratic transformations in the structural geometry of curves which originate as the central projection of a Cremona quadratic transformation between two different planes and which are characterized by a simple structure of the corresponding formations. The derived transformations lead also to ready construction of the tangents of the transformed curves. The application of these transformations in the construction of conic sections and of rational cubics and quartics is pointed out. Orig. art. has 12 figures.

ASSOCIATION: Katedra matematiky a deskriptivni geometrie strojni fakulty Ceskeho vysokeho uceni technickeho, Prague (Department of Mathematics and

Descriptive Geometry, Mechanical Engineering, ...  
Card 1/2

L 60283-65

ACCESSION NR: AP5021198

SUBMITTED: 08Jul63

NO REF SOV: 001

ENCL: 00

OTHER: 003

SUB CODE: MA

JPRS

NOVAK, Josef (Prague)

The 1964 Archimedes Symposium in Syracuse. Cas pro pest mat 89  
no.4: 501-502 0 '64.

NOVAK, Josef

178

On ~~some~~ problems concerning multivalued convergencies.  
Chekhosl mat zhurnal 14 no.4:542-561 N '64.

1. Mathematical Institute of the Czechoslovak Academy of  
Sciences, Prague 1, Zitna 25. Submitted on May 7, 1963.

NOVAK, Josef

On convergence spaces and their sequential envelopes. Chekhosl  
mat zhurnal 15 no.1:74-100 '65.

1. Institute of Mathematics of the Czechoslovak Academy of  
Sciences, Prague 1, Zitna 25. Submitted November 11, 1963.

NOVAK, J. *Novak*

Investigation of the mutual relation between parameter deviations of moving layers. Chekhosl fiz zhurnal 15 no.3:210-212 '65.

1. Faculty of Mathematics and Physics of the Charles University, Prague 2, Ke Karlovu 5. Submitted May 23, 1964.

MIKULA, M.; NOVAK, J.

Roentgenologic investigations of the pelvis in newborn and their results. Acta chir.orthop.traum.czech 18 no.1:7-24 1951. (CIHL 29:7)

1. Prof. M. Mikula, M.D. of the Department of Children's Surgery and Orthopedics and J. Novak, M.D. of the Second Obstetrical Clinic.



PAVLANSKY, Rudolf, MUDr.; NOVAK, Josef

Corset straightening of a spinal deformity caused by  
syringomyelitis. Acta chir. orthop. traum. cech. 23 no.  
3:162-164 June 56.

1. Orthopedické oddelení SON Bulovka, primar MUDr. Rudolf Pavlansky  
Výzkumné oddel. prothetické n. p. Orthopédia-Vyšehrad, přednosta  
MUDr. Frant. Krivánek.

(SPINAL CORD, dis.

syringomyelitis, causing kyphosis, correction by corset. (Cz))

(KYPHOSIS, etiol. & pathogen.

syringomyelitis, correction by corset. (Cz))

NOVAK, Josef

New portable orthopedic apparatus for congenital dislocation of the hip joint. Acta chir. orthop. traum. cech. 26 no.5-6;447-451 1959.

1. Ortopedická sekce vyvojového střediska při n. p. Dental, Praha,  
veditel MUDr. František Krivánek.  
(HIP, fract. & disloc.)

NOVAK, Josip. major dr.

Review of a partisan march. Voj. san. pregl., Beogr. 11 no.11-12:  
645-649 Nov-Dec 54.

1. Vojna bolnica u Skoplju.  
(ATHLETICS, physiol.  
partisan march in Yugosl., eff. on cardiovasc. system)  
(CARDIOVASCULAR SYSTEM, physiol.  
eff. of partisan march in Yugosl.)

NOV 11 1955  
PIJADE, R; TEVCEV, D.; NOVAK, J.

Generalized hyperostosis with pachyderma. Srpski arh.celok.lek.  
83 no.2:256-259 Feb. '55.

1. Radioloski institut Medicinskog fakulteta u Skoplju. V.D.  
Upravnika: dr. Ivan Anastasov. Rentgenološko odeljenje Vojne bol-  
nice u Skoplju Kacelnik: major dr. Rafael Pijade.

(BONES, dis.

hyperostosis, with pachyderma(Ser))

(SKN, dis.

pachyderma with generalized hyperostosis (Ser))

NOVAK, Josip, Major dr.

Congenital intercostal deformity with hernia of the right lung:  
case report. Voj. san. pregl., Beogr. 13 no.5-6:294-295 May-June  
56.

(RIBS, musc. & tendons  
agenesis of intercostals with hernia of right lung in  
child (Ser))  
(HERNIA, in inf. & child  
right lung, with agenesis of intercostal musc. (Ser))  
(LUNG DISEASES, in inf. & child  
hernia of right lung with agenesis of intercostal musc. (Ser))

PIJADE, Rafael; NOVAK, Josip

Personal experiences in the tomography of maxillary sinuses.  
Srpski arh. celok. lek. 84 no.4:460-467 Apr 56.

1. Radiolosko odeljenje Vojne bolnice u Skoplju. Macelnik:  
major Rafael Pijade.

(MAXILLARY SINUS, radiography  
tomography (Ser))

(ROENTGENOGRAPHY  
tomography of maxillar sinus (Ser))

PIJADE, Rafael, dr.; NOVAK, Josip, dr.

Contribution to the differential diagnosis of pulmonary echinococcosis.  
Med. glasnik. 13 no.7:357-359 JI 1959.

1. Rendgenolosko odeljenje Vojne bolnice u Skoplju, macelnik:  
ppuk. dr R. Pijade.

(LUNG DISEASES diag.)

(ECHINOCOCCOSIS diag.)

PAKIC, Marko, d-r, sanitetski potpukovnik; NOVAK, Josip, d-r, sanitetski potpukovnik

March fractures in soldiers. Voj. san. pregl. Beogr. 17 no.2:157-163 '60.

(LEG fract. & disloc.)



MILOSEVIC, K.; NOVAK, J.

Cavernous forms of tuberculosis in children. Tuberkuloza 15  
no.1:39-46 Ja-Mr '63.

1. Spec. bolnica za decju tuberkulozu, Skopje - Sef: prim.  
dr Klimentije Milosevic Armijska bolnica, Skopje - Sef: Potpuk,  
dr Josip Novak.

(TUBERCULOSIS, PULMONARY)  
(TUBERCULOSIS IN CHILDHOOD)  
(THORACIC RADIOGRAPHY)

2

PREDANIC, Edo [deceased]; NOVAK, Josip

Primary sarcoma of the small intestine. God. zborn. med. fak.  
Skopje 11:39-48 '64.

1. Vojna bolnica u Skopju.



KOVAK, Josip, inz.

Telephone tandem office in Ljubljana. PTT zbor 16 no.4:91-94  
Ap '62.

NOVAK, Josip, inz.

The new interurban telephone exchange at Koper. PTT zbor 16  
no.6:154-156 Je '62.

NOVAK, Josip, dipl. inz.

Cordless switchboards for interurban calls on public telephones  
("ISKRA" system). Telekomunikacije 13 no.3/4:22-26 6-1 '64.

NOVAK, J.

Distr: 4E3d/4E2c(j)

The vapor pressure of cyclohexanol and of cyclohexylamine. J. Novak, J. Matouš, and J. Píck (Vysoká škola chemicko-technol., Prague). Collection Czechoslov. Chem. Commun. 25, 682-5(1960).—The relations of the vapor pressures of cyclohexanol (I) and of the cyclohexylamine (II)

were detd. ebulliometrically in the range from 50 up to 780 mm. Hg. The results were expressed by the equations: for I:  $\log P = 0.5562 - 1067.8/(t + 129.2)$  and for II:  $\log P = 0.6272 - 1203.2/(t + 186.7)$ . E. Erdős

all  
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cos

7.  
17.9 (113)  
1.3w (3w)  
2

KRUPICKA, J.; NOVAK, J.J.K.

Polarographic determination of methylglyoxals. Coll Cz Chem  
25 no.5:1275-1280 My '60.

1. Abteilung für organische Synthesen, Chemisches Institut,  
Tschechoslowakische Akademie der Wissenschaften, Prag.



NOVAK, J.

Distr: 4E2c(1)/4E3b

4  
Osmometric and viscometric determination of the molecular weight of butadiene-styrene copolymer. J. Novák and L. Rosík (Výzkumný ústav syntetického kaučuku, Gottwaldov, Czech.). *Collection Czechoslov. Chem. Commun.* 25, 1762-8(1960).—The mol. wts. of butadiene-styrene copolymer fractions were detd. by the modified 2-membrane osmometer according to Hellfritz (cf. CA 47, 8417c) with an accuracy of  $\pm 12\%$ . From viscometric measurements the following relations were found in the range of mol. wts. up to  $10^4$ :  $[\eta] = 2.44 \times 10^{-4} M^{0.5}$  and  $[\eta] = 1.29 \times 10^{-4} M^{0.5}$  for copolymer with 0.1 and 0.2 wt. % of Diproxid, resp. E. Eder.

1-BW (BW)  
2-JAT (WJ) (MAY)

2

FARKAS, J.; NOVAK, J.J.K.

Relation between the chemical structure and insecticidal activity in pyrethroid compounds. III. Analogue of allethrin with the modified acid portion of the molecule. Coll Cz Chem 25 no.7:1815-1823 J1 '60. (EEAI 10:9)

1. Abteilung für organische Synthesen, Chemisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Pyrethroids) (Allethrin)

FARKAS, J.; KOMRSOVA, H.; KRUPICKA, J.; NOVAK, J.J.K.

Relation between the chemical structure and insecticidal activity  
in pyrethroid compounds. IV. Effect of the substituent of the side  
chain in the process of the Laforge cyclization. Coll Cz Chem 25  
no.7:1824-1836 J1 '60. (EEAI 10:9)

1. Abteilung für organische Synthesen, Chemisches Institut, Tschecho-  
slowakische Akademie der Wissenschaften, Prag.

(Pyrethroids) (Ring closure)

NOVAK, J.; MATOUS, J.; PICK, J.

Balance: liquidity-steam, XXIV. Balance: liquidity-steam in cyclo-  
hexylamine-cyclohexanol system. Coll Cz Chem 25 no.9:2405-2413  
S '60. (EEAI 10:9)

1. Institut für physikalische Chemie, Technische Hochschule für Chemie,  
Prag.

(Phase rule and equilibrium) (Cyclohexamine)  
(Cyclohexanol) (Systems(Chemistry))

NOVAK, J.

Distr: 4E2c(j)

15  
Mechanism of the thermodegradation of poly(vinyl chloride) (PVC). J. Novák (Forsch. inst./Kautschuk-u. Plastikverarbeitg., Gottwaldov, Czech.). Kautschuk 90, 201-3 (1987).—A survey dealing with the cause of side effects and influence of HCl developed by degradation on color change. The presence of O contributes considerably to these changes. App. is illustrated for measuring elec. cond. Arthur L. ...

3

19-9 (NA)

1

S/081/62/000/023/110/120  
B117/B186

AUTHORS: Daněk, Otto, Novák, Jindřich

TITLE: Method of stabilizing chlorine-containing polymers and co-polymers, and other highly chlorinated compounds

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 751, abstract 23P526 (Pat. CzSSR 100677, August 15, 1961)

TEXT: To prevent the discoloration of chlorine-containing polymers, e.g. polyvinyl chloride, additions (0.5 - 5%) of compounds having the common formula  $(C_4H_9)_2Sn(OOCCH=CHCOOR)_2$  are used during heating. R stands for 2-ethyl hexyl, dimethyl cyclohexyl (isomer mixture), alkyl, or alkenyl with 8 - 20 C atoms. [Abstracter's note: Complete translation.]

Card 1/1

NOVAK, J.J.K.; FARKAS, J.; SOFM, F.

Relationship between chemical structure and insecticidal action in the series of pyrethroide substances. Part 5: A synthesis of trans-2, 2-dichloro-3-phenylcyclopropane-carboxylic acid and its allylrethronyl ester. Coll Cz Chem 26 no.8:2090-2092 '61.

1. Institut of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

(36)

- Prague, Collection of Czech-Slovak Chemical Communications, Vol. 27, No. 4, April 1952 (continuation).
9. "Separation Methods for Natural Products. Part II. Synthetic Dimerization and Double Hydrolysis." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 342-343.
  10. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. The Obtaining of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 343-344.
  11. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 344-345.
  12. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 345-346.
  13. "On Proteins. Part XVIII. Synthesis of Proteins Obtained by Hydrolysis of Carboxylic Acids." J. FRYDA, J. FRYDA, J. FRYDA, and J. FRYDA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 346-347.
  14. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 347-348.
  15. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 348-349.
  16. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 349-350.
  17. "Synthesis of Compounds in the Group of Reproductive Hormones. Part XIII. On the Synthesis of the Alkylated Compound for the Synthesis of the Hormone 17- $\beta$ -Estradiol." J. FRYDA and V. PROCHÁZKA, Prague, Collection of Czech-Slovak Chemical Communications (English article), Prague, 1952, pp. 350-351.

2200 AK, J. I. K.





BC

**Polarographic studies with the dropping mercury cathode. LXVIII. Hydrogen overpotential in light and heavy water. J. Novák**  
(Coll. Czech. Chem. Comm., 1937, 2, 207--237)

The inflexion points on the current-voltage curves due to the deposition of hydrons at the dropping Hg cathode in 99.6% D<sub>2</sub>O (I) at 20° and 60° are negative to the extent of 87 and 71 mv., respectively, with respect to the vala. in H<sub>2</sub>O. The factor *b* of the *b* log *i* term of the overvoltage relation is 113 mv. in (I) and 102 mv. in H<sub>2</sub>O at 20°, and increases less rapidly than is required by the linear relation with *T*. The electrode potential of 1% Tl-Hg in (I) is 3 mv. > in H<sub>2</sub>O, and the potential of electroreduction, *π*, of maleic acid in 0.1N-HCl in (I) is 13 mv. > in H<sub>2</sub>O (cf. A., 1935, 1078). The *π* of O<sub>2</sub> to H<sub>2</sub>O<sub>2</sub> in 0.1N-K<sub>2</sub>CO<sub>3</sub> is the same in H<sub>2</sub>O as in (I), but the *π*

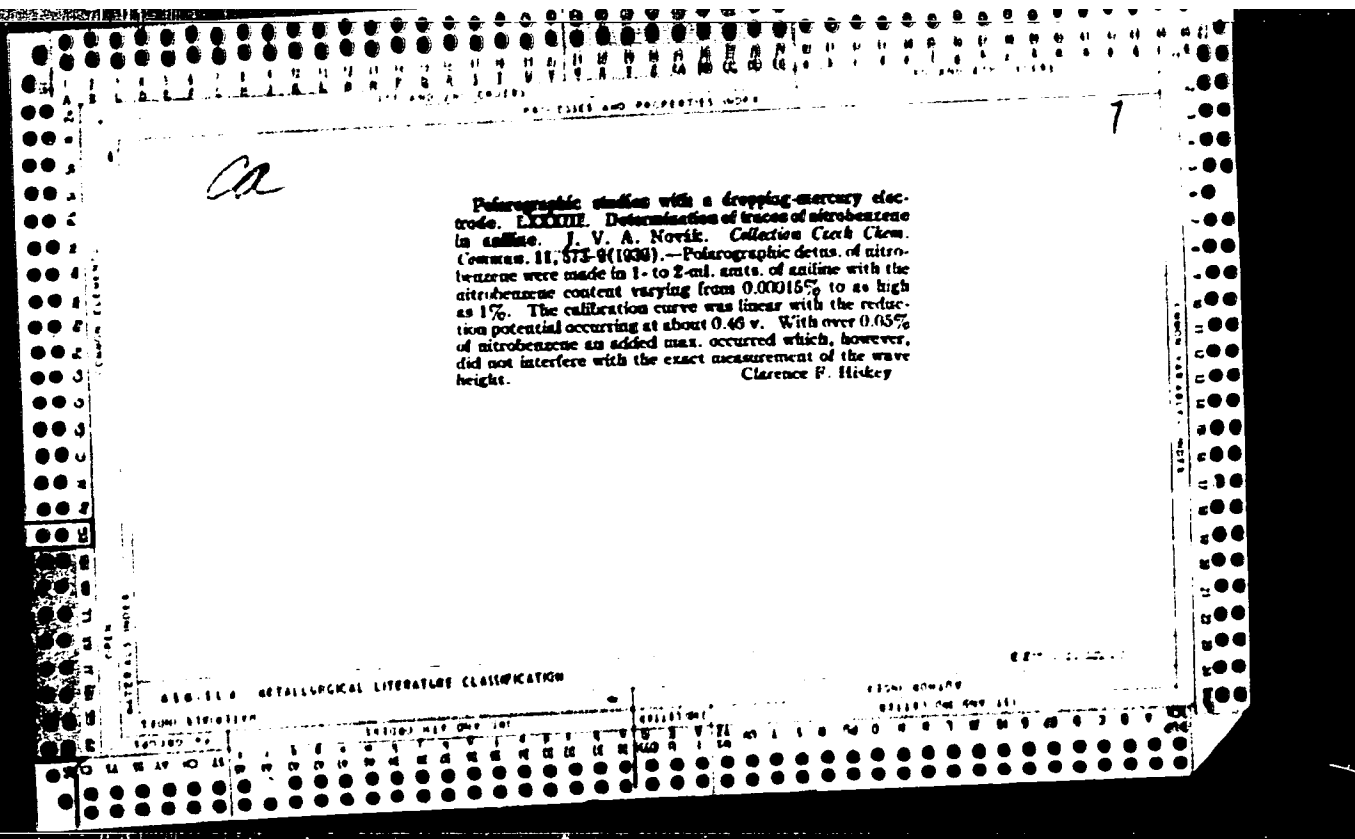
of H<sub>2</sub>O<sub>2</sub> to H<sub>2</sub>O in (I) is 44 mv. negative with respect to that in H<sub>2</sub>O (cf. A., 1930, 304; 1935, 1208).  
J. G. A. G.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

**Polarographic studies with the dropping mercury cathode. LXVI. Estimation of cadmium in zinc chloride.** H. K. Kuo and J. V. A. Nival, *Collection Czechoslov. Chem. Commun.* 10, 444-447 (1945); cf. C. A. 23, 2645. Heat 0.5 g. of sample with 5 ml. of concd. HCl in a 25-ml. volumetric flask until fumes no more HCl is evolved. Then add 0.5-1 ml. of concd. HNO<sub>3</sub> and heat until a clear soln. is obtained. Cool, add 5 drops of satd. Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> soln. and ppt. hydrazine of Fe and Pb by adding 10 ml. of concd. H<sub>2</sub>SO<sub>4</sub> concn. 5 drops of satd. Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> soln. Make up to exactly 25 ml. by adding 0.5 ml. of satd. aq. gelatin soln. and sufficient 0.01 N Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> soln. and allow the ppt. to settle. Take 5 ml. of the clear supernatant soln. into a 10-ml. beaker which serves as the electrolyzing vessel. Cover the bottom of the beaker with

Hg and make this the anode. Insert the capillary Hg tube to serve as a cathode. Then plot the polarographic curve. Since the anodic potential in the ammoniacal sulfide solution is 0.4 V, the Cd wave appears at 0.6 V. By means of a second curve with a known quantity of Cd, the percentage Cd can be calculated. On the polarographic curve can be compared with a standard calibration curve obtained by studying solutions containing known Cd. The method serves for the satisfactory detection of 0.01–0.2% Cd. W. T. H.

| 117 AND 119 SERIES                                         |  | PROCESSING AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 120 AND 121 SERIES |  |
|------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|--|
| 73C                                                        |  | <p>Polarographic studies with the dropping mercury cathode. LXXVI. Determination of cadmium in blende. R. KRAUS and J. V. A. NOVAK (Coll. Czech. Chem. Comm., 1938, 11, 534-541).—Cd in blende (containing 0.01-0.2% Cd) is determined polarographically with a precision of 2% of the Cd present. The sample (0.5 g.) is dissolved in HCl + HNO<sub>3</sub> and excess of aq. NH<sub>3</sub> containing Na<sub>2</sub>SO<sub>3</sub> is added to ppt. Fe(OH)<sub>3</sub> and Pb(OH)<sub>2</sub>, a little gelatin being added to prevent interference by Cu. The current-voltage curve is then directly obtained using this solution exposed to air. The "wave" occurs at -0.7 v. (from N.HgCl<sub>2</sub> zero), the [Cd] being determined from a calibration curve or by comparing the height of the wave with that obtained on repeating the experiment with the addition of a definite [Cd].</p> <p style="text-align: right;">F. H.</p> |  | B-I-6              |  |
| <p>ASAC. 5.1.4 METALLURGICAL LITERATURE CLASSIFICATION</p> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |  |
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| <p>12000 0000</p>                                          |  | <p>12000 0000</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <p>12000 0000</p>  |  |



CA

How electrolytic vessels for polarographic analysis.  
J. V. A. Norrish (United Chem. Met. Works, Natl.  
Corp., Utah and Luben). *Collection Czechoslov. Chem.*  
Comments. 17, 207-44(1947)(in English).—A simple  
type of polarographic vessel suitable for serial analyses  
and quick routine work is described, and another simple  
vessel with a sep. reference electrode is also recommended.  
A description of the adjustment of the capillary for the  
dropping Hg electrode, suitable for practical work, is  
given. Experience in dealing with exact polarographic  
detus. at room temp. is discussed. N. does not recom-  
mend the use of a thermostat; instead a trace of the stand-  
ard is made on the same paper at room temp. The vessel  
is simply immersed in a large beaker of water at room  
temp., and the inert gas passed for 2-3 min. to establish  
a uniform temp.

London A. Server

CA

The addition of nitro compounds to dienes III has been studied by O. Wichterle and J. Novák (Hydro-1,2,3-triazine (O) Wichterle and J. Novák Collection Czechoslov. chem. Commun. 19, 80 (1954)).  
Collection Czechoslov. chem. Commun. 19, 80 (1954). The Zn and catalytic hydrogenation of C<sub>6</sub>H<sub>5</sub>-CH=CH-CH<sub>2</sub>-NR (I) is described. In the reduction of HCl·R + Et with Zn and AcOH, the ring is split to give I amine 2 butane 2-ol (II). With PtCl<sub>2</sub> products are obtained, the tetraamino 2-butene (III), piperidine (IIIA), and I amine 2 butane (IV). IV is also obtained from (IIIA), and I amine 2 butane (IV) is reduced by the Zn and AcOH solution of III. R = Et (5 g. in 50 cc. A) is stirred with 5 g. Zn dust, and after the vigorous reaction subsides, the solvent is removed in vacuo, the residue added with H<sub>2</sub>O, and the Zn salts pptd., as the sulfate, giving, after purification, II as a viscous liquid, b.p. 84–85°, n<sub>D</sub><sup>20</sup> 1.4992, d<sub>4</sub> 1.011. I (6.05 g.) in 250 cc. MeOH is hydrogenated in the presence of PtCl<sub>2</sub> catalyst, the reaction regenerated in the presence of H<sub>2</sub>O (cc. 14) and fractionally distilled, moved, the residue treated with ether and fractionally distilled, and the basic ppt. extd. with ether and fractionally distilled, giving IIIA, b.p. 84–85° identified as the chloroplatinate, m.p. 107–108°, IR (KBr) 3.0 μm. III and PhNCS formed the 1:1:2 adduct, IR 3.0 μm. III and PhNCS formed the 1:1:2 adduct, IR 3.0 μm. IV and PhNCS gives 1:1:2 adduct.

phenyl-2-thiouracil, m. 105°; I (10 g) reduced with 10 g  
butyllithium gives 2-ethyl-3,6-dihydro-1,2,2,2-tetrazine (V), b.p. 100°  
at 0.5 mm, d. 0.9071, n<sub>D</sub><sup>20</sup> 1.4901. V (5 g) with  
0.5 g Zn in 10 cc. AcOH gives 3,2-glyoxal-2-thiouracil (VI),  
m.p. 82-83°, n<sub>D</sub><sup>20</sup> 1.4882, d. 0.9470. III (10 g) and 1.5 g 1-ethyl-  
2-thiouracil-4-hydroxy-1,2,2,2-tetrazine (VII), b.p. 61-63°, n<sub>D</sub><sup>20</sup>  
1.4372, d. 0.9074. VI (5 g) with Zn gives 3,1-glyoxal-2-  
thiouracil-4-hydroxy-1,2,2,2-tetrazine (VIII), b.p. 78-79°,  
n<sub>D</sub><sup>20</sup> 1.4548, d. 0.9120. When  
10 g I in 25 cc. HCl acidified with HCl is treated with 6 g  
NaCN in the cold, the solution turns yellow and deposits only  
yellow-brown droplets; the oil and other parts of the liquid  
are combined, dried, and distilled after removal of the solvent  
giving 2-ethyl-3,6-dihydro-1,2,2,2-tetrazine (VIII), b.p. 74-  
75°, n<sub>D</sub><sup>20</sup> 1.4510. III (10 g) in 50 cc. MeOH and 30 g MeI  
gives 2,2-dimethyl-3,6-dihydro-1,2,2,2-tetrazine iodide (VIII),  
m.p. 133° (decompos.). VIII with Ag<sub>2</sub>O or Ag<sub>2</sub>OAc gives the  
unstable quaternary hydroxide and acetate. The following  
derivatives of I were also prepared: 2-Et, by 151-5°; 2-Et,  
by 152-1°; 2-Et, by 78°. Derivatives of III: 2-Et, by 152-1°;  
2-Et, by 151-5°. An attempt to prepare the quaternary  
hydroxide of I with HNO<sub>3</sub> gave an explosive product.  
Bernard Klein

1951

NOVAK, J. V. A.

2a(2.4) PHASE I BOOK EXPLOITATION CICH/2433

International Polarographic Congress. 1st, Prague, 1951

Shorník I. Mezinárodní polarografického sjezdu. Díl 3. Hlavní zprávy, přednášky a sdělení. Proceedings... Vol. 3. Reviews of the Congress. Praha, Přírodovědecký ústav (1952) 774 p. 2,000 copies printed.

Resp. Ed.: Jiří Koryta, Doctor; Chief Ed. of Publishing House: Milan Skalný, Doctor; Tech. Ed.: Oldřich Duka.

PURPOSE: The book is intended for chemists, chemical engineers, and physicists.

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. The use of polarography in organic and inorganic analysis, in agriculture, medicine, and industrial chemistry are discussed. In this section, Reviews Read at the Congress, Russian and either German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Wilton Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromír Dolanský, Minister of Planning; Professor Jaroslav Horavský, Chairman of the Congress; and Professor Jaroslav Fuks, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

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| [English Translation]                                                                                                |     |
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NOVAK, J., KUTA, J., RIMA, J.

"Contribution to the Polarographic Determination of Manganese and Iron" p.49,  
(CHEMICKÉ LISTY, Vol. 47, no. 5, May 1953, Praha, Czechoslovakia).

SO: Monthly List of East European Accessions, LC, Vol. 2, No.11, Nov. 1953, Uncl.

NOVAK, J.V.A.

Chemical Abst.

Vol. 48

Apr. 10, 1954

Apparatus, Plant Equipment, and Unit  
Operations

(2)  
A simple apparatus for the distillation of mercury. J. V.  
A. Novak (Polarograf. Ústav, Prague, Czech.). Chem.  
Listy 47, 800-2(1953).—A simple lab. app. without stop-  
cocks is described which is easy to construct and operate.  
The app. has a capacity of 4 kg. Hg per day and is suitable  
especially for polarographic purposes. E. Břida

Chemical Abst.  
Vol. 48  
Apr. 10, 1954  
Analytical Chemistry

The polarographic determination of iodine and iodides.  
J. V. A. Novák (Czech. Akad. Věd., Prague, Czech.).  
Chem. Abstr. 48:1283-4 (1953).—The detn. of iodides is based  
on the polarographic study of the wave of  $IO_3^-$  produced by  
the oxidation of  $I^-$  with alk. hypobromite. The method is  
suitable for detg. iodides in rock salt. Procedure: Dis-  
solve 10 g. in  $H_2O$  and dil. to 50 ml. Mix 10 ml. of this  
soln. with 1 ml.  $H_2O$ , 1 ml. of reagent prepd. by mixing 50  
ml. 5N NaOH with 50 ml. satd.  $Br$  water, and with 1 ml.  
of a soln. prepd. by mixing 50 ml. satd.  $Na_2SO_3$  with 50 ml.  
0.25% gelatin. Stir and polarograph at 0.5–1.4 v. Compare  
the wave with a standard prepd. in the same way but sub-  
stituting 1 ml. of a soln. contg. 0.1 g. KI in 2 l.  $H_2O$  for 1  
ml. of  $H_2O$  in the above procedure. M. Hudlický

NOVAK, J.V.A.

Polarographic determination of iodine and iodides [in German with  
summary in Russian]. Sbor.Chekh.khim.rab. 19 no.1:177-178 F '54.  
(MERA 7:6)

1. Polarographisches Institut, Tschechoslowakische Akademie der  
Wissenschaften, Praha. (Iodine) (Iodides)

NOVAK, J.

NOVAK, J. Polarography in the service of automation in the chemical industry. Tr. fr  
from the Czech. p. 353.

Vol. 10, No. 12, Dec. 1966.

MAGYAR KEMIKUSOK LAPJA.

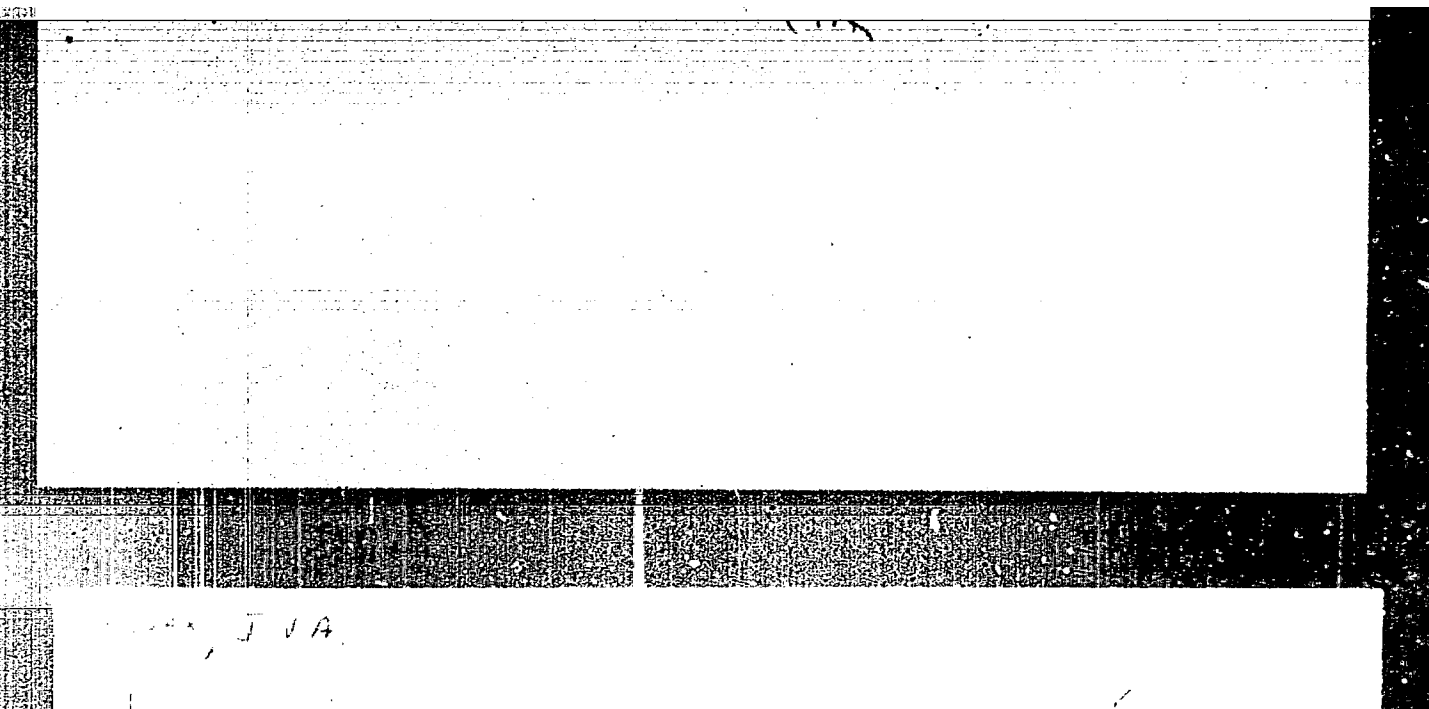
TECHNOLOGY

Budapest, Hungary

Sci. East European Accession, vol. 1, No. 6, May 1966

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CIA-RDP86-00513R001137410012-1



APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137410012-1"

NOVAK, JIRI V. A.

CZECH

Continual-service polarographic analyzers. I. The dropping mercury electrode as reference electrode. Jiri V. A. Novak (Polarograf, ústav ČSAV, Vraque). *Chem. Listy* 49:271-88(1955).—The current-voltage curves of electroanalysis between 2 polarizable Hg electrodes were studied. The dropping Hg electrode could be used to advantage as a practically nonpolarizable anode (cathode) in case the anodic (cathodic) branch of the current-voltage curve was steep enough and without waves, the dropping Hg electrode being connected as an indicator electrode. The soln. to be analyzed contained sufficient depolarizer, which gave electrolytic current of opposite direction to that produced by the component detd. Another reference electrode suitable for use as anode as well as cathode was a dropping Hg electrode in a separate soln. of an oxidation-reduction system as  $Fe^{3+}/Fe^{2+}$ . These electrodes were used with success as reference electrodes under steady flow of elec. current for some months in industrial polarographic analyzers in connection with registering and regulating devices. A continual-service analyzer of  $Ti^{4+}$  and  $Fe^{3+}$  and a CO analyzer were described. An analyzer of  $Ti^{4+}$  and  $Fe^{3+}$  used to control the process of the fish production, was designed as follows: The liquor to be controlled entered the

*Iron-mercuric*  
 electrolyte vessel through a side tube in the lower part at a rate of 1-100 ml./min., flowing upward, passing by a horizontal high-speed Hg electrode, and leaving at a side tube in the middle of the electrolytic vessel. In its upper part, the vessel was fitted with a vertical Hg reference electrode, the potential of which was given by continuous flow, 0.1-1 ml./min., of a comparatively less dense solution of 0.5M  $\text{Ti}/\text{SO}_4$  and  $\text{Ti}/\text{SO}_4$  in 10%  $\text{H}_2\text{SO}_4$  (redox  $\text{Ti}$  liquor dist. 3:1, resp.). The reference solution was left in the same tube as the analyzed solution. The Hg from the electrode was removed by a siphon placed at the bottom. A constant voltage of 0.2 v. was placed across the electrodes. The reference electrode was connected to the positive pole of a battery. The limiting current reached the value of 10-20 amp. and could be used to det.  $\text{Fe}^{2+}$  and  $\text{Ti}^{2+}$  at a concentration of 0-10 g./l. or more. Another analyzer, not usable for regulation, but suitable for registration of  $\text{Fe}^{2+}$  and  $\text{Ti}^{2+}$  contents, had the reference dropping Hg cathode dipping into the solution, being analyzed and used the described vessel without the upper side tube. The currents limited by  $\text{Ti}^{2+}$  and  $\text{Fe}^{2+}$  differed in size of oscillations. Small oscillations belonged to the



horizontal fast-scan dropping anode. A voltage of 0.2 v. was applied. In the CO analyzer equiv. amounts of  $H_2$  were set free by passing the CO-contg. gas over heated  $H_2O$ . The current was proportional to the content of CO, produced by continuous oxidation of  $H_2$  by a dil.  $KMnO_4$  soln. Surplus  $BrO^-$  was reduced by  $Na_2SO_3$  soln. continuously added. A voltage of 1.3 v. was used. A CO content of 0.01-0.0001% by vol. could be detected. Analyzers of metallic ions, nitro-compds., etc. were constructed but not described. 26 references. II. Reference electrodes with soluble depolarization products. *Ibid.* 259-93. The behavior of some solid electrode, dipping into flowing soln. of compds. with easily sol. depolarization products was studied. The potential of Pt electrodes in slowly flowing soln. contg. a mixt. of  $Fe^{3+}$  and  $Fe^{2+}$  depended approx. in the same manner on the intensity of the elec. current passing through the soln., as did the potential of the calomel reference electrodes; and in addn. to that it was quite time independent even at c.d.s. such that the 2nd-order electrodes were made passive. For this reason the electrodes with sol. depolarization products were preferred as reference electrodes in continuous-scan polarographic analyzers. Some details were given of a polarographic

*See Appendix 1*  
CIT analysis with a solid reference electrode showed that the  
mean of response to samples containing 1.0 to 10.0 mg of  
analyte. The response was in the order of 100  
amp, and the mean of field was in the order of 100. The  
voltage placed across the electrode was found empirically  
for each analyte and concn. range. (P. 10/16/64)

2040. Polarographic analyzers. J. V. A. Novak  
(Polarographic Inst., Czech Acad. Sci., Prague)  
Chem. Anal., Prague, 1956, 1 (2-3), 15-16. --  
Description is given of automatic analyzers based on  
polarography. Examples are given of instruments  
suitable for the automatic determination of Ti and  
Fe in the manufacture of pigments and cyanides,  
of O in butadiene and ethylene and in boiler water,  
of Hg in effluents, SO<sub>2</sub> in technical gases and CO in  
coal mines.  
R. F. Spozek

*Mr*

NOVAK, J.

Polarographic analyzers of long-period automatic recording. In German. p. 37.  
(Acta Chimica, Vol. 9, No. 1/4, 1956, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

1877. Determination of Complexes I (nitrotri-  
acetic acid) I. Chabik and J. Novak (Czechoslovakia)  
Chem. Abstr. 1958, 50, 1189 (1958) Various  
methods for the volumetric determination of nitrotri-  
acetic acid (I) have been revised and some new  
procedures examined. For the determination of  
small amounts of I, the colorimetric titration with  
CaSO<sub>4</sub> soln., with catechol violet (in Na acetate  
medium) or murexide (in aq. NH<sub>4</sub> soln.) as indicator  
is most suitable. When determining higher amounts

of I, the colorimetric titration without indicator is  
preferable. The error was 3-4%.

S/081/62/000 002/016/107  
3149/8102

AUTHOR: Novák, J. V. A.

TITLE: Long-range polarographic analysers IV Carbon electrode  
as an indicator electrode

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 33 abstract  
2B663 (Collect. Czechosl. Chem. Commun., v. 25, no. 12, 1960  
3028 - 3104)

TEXT A polarograph has been constructed for continuous and long-time control of the concentrations of  $\text{SO}_2$  and  $\text{H}_2\text{S}$  in industrial gases. The concentration of  $\text{SO}_2$  (up to 2%) and of  $\text{H}_2\text{S}$  (from 0.01 to 10%) is measured by their oxidation at the carbon electrode. In contrast to platinum electrodes, the activity of a carbon electrode does not alter over a very long time. Communication III of. RZhKhim, 1957, no. 3, 31170 [Abstracter's note. Complete translation.]

Card 1/1

G/002/63/000/002/002/002  
D287/D307

AUTHORS: Novák, J.V. and Tenygl, J.

TITLE: Polarographic analyzers

PERIODICAL: Chemische Technik, no. 2, 1963, 119

TEXT: The authors describe a continuously operating polarographic analyzer for the determination of NO and NO<sub>2</sub> in waste gases obtained during the preparation of nitric acid. It comprises a C-anode, a Cu-wire cathode; the electrolyte consists of 10% H<sub>2</sub>SO<sub>4</sub> (to which 1% CuSO<sub>4</sub> has been added). Oxygen from an auxiliary electrolyzer is used for the oxidation of NO to NO<sub>2</sub>. The apparatus can be used for 0.1 - 1.0% NO + NO<sub>2</sub> but the range can be extended to 10<sup>-2</sup> - 10% by increasing or decreasing the voltage from the generally used voltage of 0.9 v. A polarographic-coulometric analyzer for SO<sub>2</sub> traces is also described. Iodine, separated by anodic separation of iodide ions, is used. The Pt anode is polarized selectively (but not the Pt cathode); the depolarizer is potassium dichromate. The measuring range of 1 ppm corresponds to a throughput of 1 liter

Card 1/2

Polarographic analyzers

G/002/63/000/002/002/002  
D287/D307

gas/min 140  $\mu$  A. The apparatus can also be used for the analysis of  $H_2S$ ,  $Cl_2$ ,  $O_3$  and  $O_2$ .

ASSOCIATION: Polarografický ústav, Československá akademie věd,  
Praha, CSSR (Institute of Polarography, Czechoslovak  
AS, Prague, Czechoslovakia)

Card 2/2

NOVAK, K

"A justment of the constuction of tractors; - review of the book Serizivani a obnovovani palivove soustavy naftovych traktorů"  
(Adjustment and General Repair of the Combustion System of Naphta Tractors) p. 2  
(Technicke Noviny, Vol. 1, No. 10, Dec. 1954, Praha)

LC: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 6, June.  
1954, Uncl.



NOVAK, K: TUREK, L: WERECZYNSKI, J.

Radiolocation systems and their application in geodesy, p. 3.

PRZEGLAD NAUKOWO-TECHNICZNY, SERIA G. Krakow, Poland,  
N . 2, 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol 8, No. 11,  
November 1959  
Uncl.

NOVAK, K., inzh.

Sanitary engineering unit. Na stroi. Ros. 3 no.2:38-39 F '62.

(MIRA 16:2)

(Czechoslovakia—Bathrooms)

(Czechoslovakia—Kitchens)

NOVAK, Karel, inz., dr.

Silicon carbide for refractory purposes. Sklar a keramik 13  
no. 9:233-234 3'63.

1. Automobilove zavody, n.p., Mlada Boleslav.

Z/032/60/010/009/002/006

E073/E535

AUTHOR: Novák, K., Engineer

TITLE: Standard Specifications of New Boron Containing Steels

PERIODICAL: Strojírenství, 1960, Vol.10, No.9, pp 688-689

TEXT: The Czech heat-treated steel 12042 (0.3 to 0.4% C, 0.5 to 0.8% Mn, 0.001 to 0.005% B) with boron was developed and is intended primarily for high strength heat-treated bolts. According to the revised Czech specification ČSN 02 1010, this steel will substitute the steels 13 240 and 14 240. The compositions of these three steels are given in Table 1. In the "state 7", i.e. heat-treated for medium strength, this steel has the following guaranteed properties (for diameters up to 20 mm):

|               |                        |     |
|---------------|------------------------|-----|
| $\sigma_{Kt}$ | (kg/mm <sup>2</sup> )  | 75, |
| $\sigma_{Pt}$ | (kg/mm <sup>2</sup> )  | 90, |
| $\delta_5$    | (%)                    | 11, |
| $\Psi$        | (%)                    | 45, |
| R             | (kgm/cm <sup>2</sup> ) | 8.  |

Card 1/2